

more than \$4 trillion—\$4,296,488,021,481.61 (Four trillion, two hundred ninety-six billion, four hundred eighty-eight million, twenty-one thousand, four hundred eighty-one dollars and sixty-one cents) during the past 15 years.

#### U.S. FOREIGN OIL CONSUMPTION FOR WEEK ENDING JANUARY 23D

Mr. HELMS. Mr. President, a troubling aspect in assessing all aspects of maintaining a strong U.S. national security is one that receives scant attention—the fact that the United States is more deeply dependent upon foreign countries to supply most of America's energy needs. The situation today is worse than ever before in our history.

I began in 1996 my reports to the American people every week in which I stated the precise amount of oil imported by the U.S. from foreign countries. Some of these countries are openly hostile to U.S. interests. I make these reports to emphasize the extent to which the U.S. has become perilously dependent on them.

I investigated this issue a decade ago when I presided over several hearings as the then chairman of the Agriculture Committee. In my present capacity as chairman of the Senate Foreign Relations Committee we have held hearings; more are scheduled this year.

While the Administration acknowledges that U.S. oil imports are a national security concern, nothing has been done by the Administration to resolve U.S. dependency on foreign oil.

Now, Mr. President, a few up-to-date statistics: The American Petroleum Institute reports that for the week ending January 23, the U.S. imported 7,776,000 barrels of oil each day, 64,000 barrels fewer than the 7,840,000 imported each day during the same week a year ago.

While this is one of the rare weeks when Americans imported slightly less oil than a year ago, Americans still relied on foreign oil for 55 percent of their needs last week, and there is no sign that the upward spiral will abate.

Before the Persian Gulf War, the United States obtained approximately 45 percent of its oil supply from foreign countries. During the Arab oil embargo in the 1970s, foreign oil accounted for only 35 percent of America's oil supply.

Which raises the inevitable question: is anybody else interested in restoring domestic production of oil—by U.S. producers using American workers?

It is argued that America should use up foreign oil reserves before tapping into our the remaining U.S. domestic supply. But I submit, Mr. President, that economic calamity will occur in America if and when foreign producers shut off our supply—or double the already enormous cost of imported oil flowing into the U.S.—now 7,776,000 barrels a day.

Mr. President, the Foreign Relations Committee will continue its examination of U.S. dependency on foreign oil

in 1998. I shall also continue to report to the Senate—and to the American people—on a regular basis regarding this increasingly dangerous trend.

#### THE IMPORTANCE OF RATIFYING THE WIPO TREATIES AND EN- ACTING WIPO IMPLEMENTING LEGISLATION

Mr. LEAHY. Mr. President, I hope that the Senate will make a new year's resolution to focus its energy on issues that create American jobs, protect American ingenuity, and improve the lives of the American people. I was disappointed last year that we wasted so much of the Senate's limited time on partisan and divisive issues.

This year the Senate should be in the business of doing America's business. We should be working in a bipartisan manner to enact copyright term extension legislation so that America's trading partners will recognize American copyrighted works for the same term that those countries grant their own national works. We should be passing encryption legislation to allow American hi-tech companies the freedom to compete vigorously in the global marketplace. We should be enacting patent reform legislation to help American innovators, big and small.

High on the Senate's agenda for doing America's business should be ratifying the World Intellectual Property Organization (WIPO) treaties and enacting WIPO implementing legislation. To this end, I would like to take a few moments to discuss why we should care about these WIPO treaties, how America will benefit when we ratify these treaties, and how we can get the job done.

#### WE SHOULD CARE

Those who care about America's economy and America's creative spirit should care about the WIPO treaties. Ratification of these treaties will help protect and enhance U.S. intellectual property rights throughout the world. In the body of the Constitution as originally ratified, the word "right" appears only once and that is with regard to the protection of intellectual property. From our beginnings as a Nation, the Constitution has included within Congress' enumerated powers, authority "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." The importance of protecting and encouraging the intellectual creations of our citizens has always been a fundamental priority for our country and a responsibility of our national government.

Today, millions of Americans owe their jobs and prosperity to industries created by America's innovators and creators. The International Intellectual Property Alliance (IIPA) released a 1996 study prepared by Economists Incorporated that outlined the contribution of U.S. intellectual property

industries to the U.S. gross domestic product, employment, and foreign trade. It detailed, for instance, that in 1994, copyright industries contributed an estimated \$385 billion to the U.S. economy, accounting for approximately 5.7% of the GDP. The study concluded that during the period from 1984 to 1994, job growth in the core copyright industries was twice as fast as employment growth in the economy as a whole. Regarding foreign sales, the study found that the copyright industries' exports are larger than the exports of almost all other leading industry sectors.

In addition to the economic boon that they provide this country, the intellectual property rights granted to U.S. citizens have fostered the creative spirit of the American people. From the days of Benjamin Franklin and Thomas Jefferson to the dawning of the coming century, American creative geniuses abound in the visual arts, recording, writing, and software development industries. The U.S. leads the world in creative products. What other country can boast of the multitude of creative, artistic, and technological visionaries?

#### AMERICA WILL BENEFIT

Because the U.S. is the world-wide leader in intellectual property, the U.S. will be the main beneficiary if the U.S. Senate ratifies the WIPO treaties and the Congress enacts WIPO implementing legislation.

Secretary Daley has observed that "the treaties largely incorporate intellectual property norms that are already part of U.S. law." The Administration has concluded that the U.S. need only make two substantive changes and several non-substantive changes to U.S. law to bring it into compliance with the treaty requirements. What the treaties will do is give American owners of copyrighted material essentially the same protections for their intellectual property in those foreign countries that become party to the treaties as they enjoy here in the United States.

Let me give you an example. The U.S. already has a distribution right of the sort provided in the treaty. Many other countries, however, do not yet recognize this right. So if a U.S. publishing company suspects that its books are being illegally copied in a country that does not have a distribution right, it cannot go after the distributor of the illegally copied goods in that country. Imagine trying to stop illegal drug usage if you couldn't go after the drug distributors. That is the problem that our copyrighted industries face battling piracy in many countries throughout the world today.

#### GETTING THE JOB DONE

We should consider and pass the WIPO Copyright and Performances and Phonograms Treaty Implementation Act, S.1121, which I cosponsored with Senators HATCH, THOMPSON and KOHL last July. I hope that the Senate will

not further delay in examining the impact of the treaties and the implementing legislation. We need to expedite the process of resolving issues essential to S.1121.

I intend to work with the Chairman of the Judiciary Committee on these important matters. I want to commend Senator HATCH for the time he has spent and is spending seeking to resolve matters that have become impediments to progress on important intellectual property matters.

Unfortunately, these important legislative matters were stalled last year by linkage to additional issues not necessary to their enactment. We made no progress on the treaties and implementing legislation. America cannot afford further delay.

Some have expressed concern that ratification of the WIPO treaties and enactment of implementing legislation threaten to increase what they perceive to be a current risk that they will be held liable for copyright infringements by users whose conduct they can neither prevent nor control. They are demanding legislation limiting their copyright liability and demanding that it be resolved before ratification of the WIPO treaties and passage of implementing legislation can proceed.

The extent to which and circumstances under which copyright liability may be imposed on online service providers is a matter that I believe could easily be dealt with separately from the WIPO treaties and implementing legislation. Were service provider liability to be considered legislatively, I think that Congress would be better off working toward carefully targeted clarifications of the law rather than attempting to legislate wholesale reform that risks becoming obsolete in a short time, or freezing industry practices and preventing them from evolving as efficiently as possible.

Vinton Cerf, the co-inventor of the computer networking protocol for the Internet, stated in *The New York Times*:

The Internet is now perhaps the most global and democratic form of communications. No other medium can so easily render outdated our traditional distinctions among localities, regions and nations.

We see opportunities to break through barriers previously facing those living in rural settings and those with physical disabilities. Democratic values can be served by making more information and services available.

Technological developments, such as the development of the Internet and remote computer information databases, are leading to important advancements in accessibility and affordability of art, literature, music, film, information and services for all Americans. Properly balancing copyright interests to encourage and reward creativity, while serving the needs of public access is the challenge. Historically, the government's role has been to encourage creativity and innovation by protecting

copyrights that create incentives for the dissemination to the public of new works and forms of expression.

Intellectual property can, at times, be arcane and abstract. But these matters have very real and important consequences to the American economy and creative spirit, and the viability of industries that produce everything from movies to records to books to software depends on it. That means that the American people are depending on us to put partisan differences aside. We may not make headline news by working on WIPO implementing legislation, but we will help create American jobs.

#### REMARKS OF GOVERNOR CECIL H. UNDERWOOD ON THE SIGNIFICANCE OF ENERGY RESEARCH AND DEVELOPMENT

Mr. BYRD, Mr. President, on yesterday, Wednesday, January 28, the Governor of the State of West Virginia, Cecil H. Underwood, appeared before the Interior Subcommittee of the House Appropriations Committee to testify about the significance of energy and research development. I ask unanimous consent that the text of Governor Underwood's remarks be printed in the RECORD.

There being no objection, the text of the remarks was ordered to be printed in the RECORD, as follows:

TESTIMONY OF CECIL H. UNDERWOOD, GOVERNOR OF THE STATE OF WEST VIRGINIA, TO THE INTERIOR SUBCOMMITTEE OF THE HOUSE OF APPROPRIATIONS COMMITTEE, JANUARY 28, 1998

Thank you, Mr. Chairman, for the opportunity to testify today about the importance of energy research and development (R&D). I bring to your deliberations the perspective of a governor of an energy-producing state, which also relies on energy-intensive industries for its economic foundation. I also come before you with a regional perspective as the chairman of the Southern States Energy Board.

By way of further introduction, as governor, I have become a leading advocate of the use of technology in moving our state forward. As I have said many times throughout West Virginia, technology is the vehicle that will drive our state into the 21st century. Applications of technology are opening new avenues for meeting the energy needs of our people, our businesses and our industries. Energy R&D will be crucial in the creation and application of the technologies that will fuel our economic engine in the years to come.

Our collective transition into a new century and millennium makes us more cognizant of other economic transitions that are underway. We are moving toward a more global economy, toward a technology-driven and information intensive economy, toward boundless applications of new technology and toward economic diversification that builds upon our industrial foundation.

As we move toward the exciting opportunities of the new times, our nation must be careful that it does not move away from energy-intensive industries that still are economically vibrant and vital or from energy sources that can help meet the growing needs of the future. As with all real progress, though, our success in economic transition

depends on our abilities to explore new ways to address traditional challenges.

Our preparation for the future is complicated also by new proposals that seek to improve our physical environment but that may have a devastating impact on the economic environment in many parts of the country, including West Virginia and the chairman's home state of Ohio. The environmental restrictions that may be imposed and the resulting economic impact on many areas make the need for energy research and development that much more urgent.

As governor of an energy-producing state, I sense that urgency more acutely, especially as such R&D would be critical to efforts in three main areas: helping our domestic energy producers meet the challenges of new regulations and an economy in transition; exploring ways that energy producing companies and traditional industries, which use significant amounts of energy, can become environmentally responsible while maintaining economic vitality; and developing new markets for traditional energy resources and new applications to meet changing market opportunities.

Energy-related R&D is a crucial investment in the future of my state and our country. It is critical to preparing the industries of our region for the challenges and opportunities of the new times ahead in the 21st century.

#### ENERGY ISSUES OF THE FUTURE FOR WEST VIRGINIA

The best way to determine an appropriate course of action is to determine first the goal or destination sought. So I begin my evaluation with what my state and our nation must do with a description of where I want us to be in 12 years.

#### *A Vision for the Year 2010*

Our vision for the year 2010 is that West Virginia will be a showcase state for efficient power generation and efficient industrial energy usage. There will be several state-of-the-art, highly efficient, environmentally compliant fossil fuel power generation plants in the state. Coal-based generation plants in West Virginia will be in compliance with all clean air regulations, demonstrating technologies developed in the U.S. Department of Energy (DOE) Clean Coal Technology program. West Virginia's manufacturing plants will be highly productive and energy efficient with virtually all waste heat and waste materials reused and recycled.

Power generation markets in West Virginia will be competitive, deregulated, and electricity rates in West Virginia will be among the lowest in the nation. Residential, commercial and industrial customers, both in and out of the state, will be able to obtain power from the most efficient sources. The power transmission system will have excess capacity, enabling export of additional power from the state; West Virginia generators will have access to the transmission grid at rates that reflect the actual cost of transmission. We believe that in 2010, as is the case today, about 75 percent of the power generated in West Virginia will be sold in competitive markets out of state and that growth in demand for power generated in West Virginia will average about 2 percent per year.

Our vision for 2010 is that West Virginia will have a significant involvement in the development and demonstration of environment technologies that enable domestic fossil fuels to remain the country's dominant fuel for generation of electricity. For example, West Virginia projects will demonstrate technologies, which reduce the amount of CO<sub>2</sub> introduced into the atmosphere during extraction and use of fossil fuels. Technologies to capture CO<sub>2</sub> and sequester it in